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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,548	01/16/2002	Sridevi Sarma	F00526/70003 (GSE/IMH)	9642
7590	12/08/2005		EXAMINER	
Donald R. Steinberg			DAVIS, GEORGE B	
Hale and Dorr LLP				
60 State Street			ART UNIT	PAPER NUMBER
Boston, MA 02109			2129	

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/051,548	SARMA ET AL
	Examiner	Art Unit
	George Davis	2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 9/26/05.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 115-136 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 115-136 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

### *Drawings*

The drawings are objected to because figures 18, A and B should read Fig. 18A and Fig.18B. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 115-136 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The method steps of claim 115 are directed to mathematical algorithm steps that are directed to abstract idea and are discussed as follow:

- (A) step recites data gathering.
- (B) step recites changing the gathered data.
- (C) step recites mathematical algorithm.
- (D) step recites mathematical algorithm.
- (E) step recites mathematical algorithm because optimization is performed by a linear programming (see specification, page 35, lines 20-22 and page 44, lines 30 and 31).
- (F) step recites mathematical algorithm because optimization is performed by a linear programming (see specification, page 35, lines 20-22 and page 44, lines 30 and 31).

The specification does refer to a useful area such as marketing products. However, the mathematical steps of the claimed invention constitute an abstract idea that fails to establish useful, concrete and tangible results. The method steps appear to be mental steps. Similar analysis applies to claims 116-136. Therefore, the claimed invention is directed to non-statutory subject matter and thus is non-statutory.

Applicant further argues at page 6, third paragraph that modifying segmentation raises the question of what is doing the modification? The specification as indicated

above recite that optimization segmentation process is nothing but a liner programming process.

Applicant finally argue at page 7, last paragraph that the claimed established concrete and tangible result as shown in page 7, last paragraph, lines 1-3. However again I would like to reassert my position that the fact that reciting optimization does not render the claim statutory.

2. Applicant's arguments filed 9/26/05 have been fully considered but they are not persuasive.

Applicant argues at page 6, first paragraph where State street case is discussed.

There is no indication in the specification that a device is performing the method steps of claim 1.

Applicant further argues at page 6, second paragraph that a tangible and concrete results are two sets of data have been input and grouped or regrouped in optimizing way. However the optimization way in the applicant specification is mathematical manipulation using liner programming (see specification, page 35, lines 20-22 and page 44, lines 30 and 31).

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

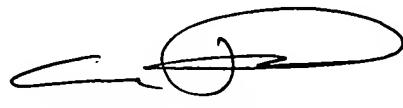
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Davis whose telephone number is (571) 272-3683. The examiner can normally be reached on Monday through Friday from 10:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent, can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3800.

December 4, 2005



GEORGE B. DAVIS

PRIMARY PATENT EXAMINER